This complete acceptance of my views is both gratifying and surprising, since neither Bancroft nor Clowes ever said or demonstrated anything of the kind until after the appearance of my various papers[4] and of the book which they review. Never before the time of these reviews has either used the terms "hydrophilic" or "lipophilic" in any of his papers on emulsification. Indeed, when I presented the importance of colloid solvates (Bancroft's "gelatinous films") for the understanding of the stabilization of oil-in-water and water-in-oil types of emulsions, at the 1916 Urbana meeting of the American Chemical Society, both gentlemen attacked my views[5] as impossible. At that time they were following Pickering's belief that the stability of an emulsion depends upon the production of an "interfacial film" between the two liquids which, in Bancroft and Clowes's mind, when bent one way, yielded an oil-in-water type of emulsion, and, when bent the other, a water-in-oil type.

Bancroft says further:

> In so far as an emulsion of oil in water is stabilized by a hydrophilic colloid, there is nothing new about this.

Here Bancroft disparages as not new the very idea which he had previously declared impossible. Of course the fact that emulsifying agents emulsify has been known since mother first made mayonnaise. What mother did not know was why her methods worked. So far as I am aware neither she, nor Clowes, nor Bancroft knew that the hydrophilic properties of colloids were an important element in the matter until I pointed this out.

Clowes concludes as follows:

> While the writer of this review would not charge Dr. Fischer with any deliberate intention to mislead, the obvious haste with which this somewhat pretentious work has been constructed suggests an attempt to skim the cream of a new idea in a promising field of research.

[4] Martin H. Fischer and Marian O. Hooker, Science, 43, 468, March, 1916; Kolloid Zeitschr., 18, 100, 1916; 18, 242, 1916.

[5] See "Fats and Fatty Degeneration," p. 29, for an account of this.

The statement in the first clause withdraws the whole charge of the critic and is inconsistent with his earlier paragraphs. His succeeding inference is unjustified and absurd. In any case scientific research presents too bounteous a table for those who sit at it to haggle over the cream.

I conclude these quotations with an opinion by Bancroft which reveals his personal animus and embraces not only my volume on fats, but all my books:

> The author's books are all interesting reading, and this one is no exception; but they should be considered as advertising matter in the guise of scientific fiction.

Thus, from his original contention at the meeting of the American Chemical Society that my views are untrue, Bancroft has come to contend that they are not new; and then, insecure upon this ground, he turns from discussing scientific issues and discusses me.

With this brief presentation I rest my case. Decision is, fortunately, not confided to *ex parte* attorneys; it is the portion of disinterested third parties, of science and of time.

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QUOTATIONS

A MEDICAL ENTENTE WITH AMERICA

We published last week an account of the very cordial reception accorded to British medicine in the persons of Sir James Mackenzie, Sir Arbuthnot Lane and Colonel Bruce by the American medical profession during the recent annual conference at Chicago. That event marks an important stage in the development of understanding and sympathy between the two countries, not only because the doctor wields in every community a large if undefined influence, but also because it is well that in the great war against disease which is now in its opening stages the two peoples should stand side by side, mutually supporting one another. American medicine has much to give, and we know that the same can be said of our own profession. The time is opportune for the

cultivation of a closer relationship than has hitherto existed, for the creation of new facilities of study, for the endowment of research fellowships on both sides of the Atlantic, and for the interchange of scientific papers and schemes of work.

Alive to the advantages to herself of a scientific *entente,* Germany before the war used all these means to attract American students to her universities and schools, and to send her students to American schools. A very large measure of success attended her efforts, with the result that not medicine alone, but the sister sciences of chemistry, bacteriology, sanitation and sanitary engineering reaped immeasurable benefits. In this country we have at last awakened to the vast importance of health and of all questions affecting it. Public opinion has demanded that a Health Ministry shall be called into being, and will see to it that the activities of that Ministry, when it comes, are not curtailed in its struggle with disease and ignorance and greed. Public opinion will equally insist that the knowledge gained and progress made by our American friends, who have essayed this task in a broader spirit and at an earlier date than ourselves, are fully utilized, and the support that they may be willing to afford us secured. We shall fight our battle with hands greatly strengthened if we fight it as members of a world-wide community. Disease is international. The hope of the conquest of disease lies in prevention, which must be international as well as local. In this respect no man and no community can say that they live to themselves. A badly constructed drain in a country village contaminating a source of water supply may give rise to an epidemic of great proportions, and this may conceivably be carried by hosts of one kind or another to the world's end. We hope, therefore, that a scientific *entente* will not stop at medicine in the narrow sense of that term. America, for example, leads the whole world in the matter of its milk supply, and our bacteriologists and social workers cannot afford to let the opportunity of help in this direction remain unimproved. Our Ministry of Health, indeed, when formed, will be strengthened in every way by the establishment of friendly relations with the State Boards of Health that have already done so much for America. We are aware that some steps towards the development of such a policy as we suggest have lately been taken, and that other measures are in contemplation. This is satisfactory so far as it goes. But the broadest possible basis of understanding is the best basis in the circumstances, and all branches of scientific work having the public health as their object should take part in the movement.—London *Times.*

SCIENTIFIC BOOKS

Principles of Economic Geology. By WILLIAM HARVEY EMMONS. McGraw-Hill Book Co. 1918. Pp. 598.

There are two recent books with which this at once invites comparison—Lindgren's "Mineral Deposits," and Ries's "Economic Geology." It is not as comprehensive as the latter, for it omits the whole of the important subjects of coal, oil and other fuels. Perhaps for this reason and to avoid confusion in title the word "Principles" is added. To the reviewer the fact that every improvement in transportation or manipulation, like the cyanide process, increases the value of the raw material and consequently lowers the grade of the material which it will pay to work, that there is a tendency to work from small quantities of high-grade material to large quantities of low-grade material, that production is normally in an accelerated ratio, should be classed as principles of economic geology. But it would not be easy for the student to pick out these or any other *economic* principles. The economic data are indeed scanty and not systematic, and there is little or no attention paid to the principles of valuation.

But if the economic side is scantily handled the geologic receives much fuller treatment. In fact twenty-one out of twenty eight chapters are concerned with the classification of ore deposits in general, their structural features and sources. Particularly valuable is the summary prefixed to the earlier chapters on the different types of deposits. Chapters